PATENT ABSTRACTS OF JAPAN

(11)Publication number:

06-134111

(43) Date of publication of application: 17.05.1994

(51)Int.CI.

7/02 A63F

7/02 A63F

A63F 7/02

7/02

A63F 7/02

(21) Application number: **04-309505**

(71)Applicant: MARUHON KOGYO KK

TECHNICAL ADVANCE:KK

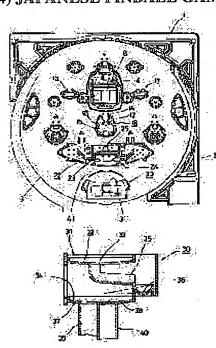
(22)Date of filing:

23.10.1992

KISHI ISAO (72)Inventor:

YOSHIDA NOBUHARU

(54) JAPANESE PINBALL GAME (PACHINKO) MACHINE



(57) Abstract:

PURPOSE: To improve an interest by maintaining hit probability of an ordinary picture pattern display device or a combination display device with high probability until a prescribed time, when a ball which goes into an invalid ball/valid ball distributing device provided with the inflow control means of a ball becomes a valid ball.

CONSTITUTION: A distributing device 30 consisting of an inflow port 31, a guide circular groove 32, a through hole 33, a guide circular groove 34, a discharge flow passage 36, an invalid hole 38, a valid hole 37, an invalid pipe 40 and a valid pipe 39, and for distributing an invalid ball and a valid is arranged right under a prize-winning device 22. An opening/closing cover device is arranged right above the distributing device 30 so that it can move forward and backward from the front of a game board 3 on the front edge of the inflow port 31, and controls the inflow of balls into the distributing device 30. In such a state, in the case the ball which goes into the distributing device 30 becomes the valid ball, the probability of a hit display of an ordinary

picture pattern display device or a combination display device 6 is maintained with high probability until the great hit display of a prescribed number of times is generated.

LEGAL STATUS

[Date of request for examination]

19.12.1995

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

2745036

[Date of registration]

13.02.1998

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] If a game sphere passes through the starting gate which was constituted by two or more pattern displays which are characterized by providing the following, and which indicate the various pattern defined beforehand by change, and was equipped with sphere detection equipment The combination display with which change is started, and each pattern display stops and displays the pattern of various combination based on the sphere detection signal from sphere detection equipment, The special winning-a-prize mouth which will carry out an open operation if each halt pattern of the aforementioned combination display serves as "great success" display which is predetermined combination, What is usually changed into the pattern display and the open position which shows the game sphere to the starting gate equipped with sphere detection equipment for which starts change, and will be stopped and one of patterns will be displayed in several sorts if a

game sphere usually passes through the pattern starting gate, and a closing position Symmetry equipment which is in the thing equipped with the winning-a-prize mouth switchgear which carries out an open operation when the aforementioned common pattern display is a predetermined per ["]" display, and distributes the ball which flowed to an invalid ball and an effective ball An inflow regulation means to control the inflow of the ball to symmetry equipment A control-command means to usually maintain the hit probability of pattern display or combination display to high probability till a predetermined stage when the ball which flowed into symmetry equipment turns into an effective ball

[Claim 2] The pachinko machine according to claim 1 carry out having constituted with the opening-and-closing lid equipment changed into the cover position which is arranged on symmetry equipment in the aforementioned inflow regulation means, covers the input of symmetry equipment, and intercepts the inflow of a ball, and the open position which evacuates and enables the inflow of a ball, and the timing driving gear carry out [stage / specific] a conversion drive to predetermined-time open position in the aforementioned opening-and-closing lid equipment as the feature. [Claim 3] The pachinko machine according to claim 1 which is arranged on symmetry equipment, carries out opening of the aforementioned inflow regulation means to a lower part, and is characterized by constituting from a winning-a-prize mouth switchgear which supplies a winning-a-prize ball to the input of the aforementioned distribution equipment.

[Claim 4] The pachinko machine according to claim 1 carry out having arranged the aforementioned inflow regulation means on symmetry equipment, and having constituted with the supply control unit changed into the maintenance position in which a hitted ball is caught and it piles up, and the open position which distributes a stay ball and is supplied to equipment, and the timing-control equipment which carries out the conversion drive of the supply control unit to a supply position only at a specific stage as the feature.

[Translation done.]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] this invention relates to the pachinko machine equipped with the combination display which makes a winning-a-prize mouth open wide specially with predetermined combination.

[0002]

[Description of the Prior Art] If a game sphere passes through the starting gate which was constituted by two or more pattern displays which indicate the various patterns defined beforehand

by change, and was equipped with sphere detection equipment The combination display with which change is started, and each pattern display stops and displays the pattern of various combination based on the sphere detection signal from sphere detection equipment, What was equipped with the special winning-a-prize mouth which carries out an open operation when each halt pattern of this combination display was predetermined combination is called a "fever formula game machine", and is proposed variously.

[0003] Moreover, the common pattern display which starts change, will stop and will indicate the various patterns by unspecified if a game sphere passes through the pattern gate, The open position which it is open for free passage to the starting gate, and opening-and-closing ****** reverse-8-type-tilts, and shows a game sphere to the starting gate, It is changed into the synizesis position where opening-and-closing ***** stands up, and open position is equipped with the winning-a-prize mouth switchgear by which a conversion drive is carried out when the halt pattern of pattern display is usually a predetermined pattern. by opening of this winning-a-prize mouth switchgear The transmission coefficient of the game sphere to the starting gate is raised, and the thing it was made to raise the drive frequency of combination display is also proposed.

[Problem(s) to be Solved by the Invention] Although the composition usually raises the probability of occurrence of the hit pattern of pattern display or the hit pattern of combination display, and it is made to make a game person produce gain, and was made to produce the pachinko game which was rich in change may be proposed when it is in this pachinko machine and various conditions are fulfilled When the occurrence of a condition of this gain is produced only inside software, there is a trouble of making a game person producing a doubt, or the condition being unclear for a beginner and being hard to uplift challenge volition. this invention understands clearly the shift conditions to the above-mentioned quantity probability, it is equipped with the composition which can check, supplies a play person with predetermined gain, and aims at offer of the pachinko machine to obtain which increases the interest of a game.

[Means for Solving the Problem] If a game sphere passes through the starting gate which this invention was constituted by two or more pattern displays which indicate the various patterns defined beforehand by change, and was equipped with sphere detection equipment The combination display with which change is started, and each pattern display stops and displays the pattern of various combination based on the sphere detection signal from sphere detection equipment, The special winning-a-prize mouth which will carry out an open operation if each halt pattern of the aforementioned combination display serves as "great success" display which is predetermined combination, The common pattern display equipped with sphere detection equipment which starts change, will stop and will display one of patterns in several sorts if a game sphere usually passes through the pattern starting gate, It is what is changed into the open position which shows a game sphere to the starting gate, and a synizesis position. The symmetry equipment which is in the thing equipped with the winning-a-prize mouth switchgear which carries out an open operation when the aforementioned common pattern display is a predetermined per ["]" display, and distributes the ball which flowed to an invalid ball and an effective ball, It is characterized by providing an inflow regulation means to control the inflow of the ball to the aforementioned symmetry equipment, and a control-command means to maintain the hit probability of the aforementioned common pattern display or combination display to high probability till a predetermined stage when the ball which flowed into the aforementioned symmetry equipment turns into an effective ball. [0006] The aforementioned inflow regulation means is arranged on the aforementioned symmetry equipment, and it can constitute with the opening-and-closing lid equipment changed into the cover

position which covers the input of symmetry equipment and intercepts the inflow of a ball, and the open position which is evacuated and is carried out in the inflow of a ball as it is possible, and the timing driving gear carry out [time / specific] a conversion drive to predetermined-time open position in the aforementioned opening-and-closing lid equipment.

[0007] Moreover, the aforementioned inflow regulation means is arranged on symmetry equipment, carries out opening to a lower part, and can consist of winning-a-prize mouth switchgears which supply a winning-a-prize ball to the input of the aforementioned distribution equipment. [0008] Furthermore, the aforementioned inflow regulation means is arranged on symmetry equipment, and it can constitute with the supply control unit changed into the maintenance position in which a hitted ball is caught and it piles up, and the open position which distributes a stay ball and is supplied to equipment, and the timing-control equipment which carries out [stage / specific] a conversion drive to a supply position in a supply control unit. [0009]

[Function] If a game sphere passes through the starting gate, combination display will drive, and it starts, and each pattern will stop and will display the pattern of various combination. And when this pattern turns into patterns of predetermined combination, such as the same pattern, for example ("great success" display), a winning-a-prize mouth opens wide specially, and a game person is made to produce big gain.

[0010] And when the ball supply to the input of distribution equipment is made by the inflow regulation means illustrated by **** and this ball is able to distribute as an effective ball at a specific stage, such as making it synchronize with a great success operation being completed and opening of combination display being completed etc., high probability usually maintains the hit probability of pattern display or combination display till a predetermined stage. Therefore, when pattern display usually serves as high probability, the rate of winning-a-prize prehension of a sphere improves, ball reduction is pressed down, and when combination display serves as high probability, the possibility of great success increases.

[0011]

[Example] The example of this invention is explained about an accompanying drawing. Drawing 1 is the front view of the pachinko machine 1 of the first example, and a ball saucer, the rotating type handle for ball discharge, etc. are prepared in the lower part which the machine frame 2 does not illustrate. As drawing 2 expands and shows, the pin center, large case 4 is arranged in the center of the face of a board of the game board 3, and the pattern displays 7a, 7b, and 7c which consist of three 7 segment indicators which constitute the combination display 6 are installed in the wearing window hole 5 formed in the center of this pin center, large case 4 side by side. The aforementioned pattern displays 7a, 7b, and 7c are constituted by Light Emitting Diode or liquid crystal, and the pattern which can express "0" - "9", "A", "J", and "L" -- etc. with 7 segment indicator which consists of a number and the alphabet is displayed. Moreover, the standby record lamp train 9 which consists of four pilot lamps is formed in the direct lower part of the wearing window hole 5. [0012] Furthermore, the common pattern display 10 which consists of a 7 segment indicator is arranged in the upper part of the aforementioned pin center, large case 4. This indicator-chart handle is made into three patterns containing "7", and, in "7" displays, is considered as a hit. When it consists of two or more these Light Emitting Diode lamp as which, as for the pattern display 10, various colors are usually displayed and the Light Emitting Diode lamp of a specific color lights up, you may be made to consider this as a hit.

[0013] In addition, the winning-a-prize mouth 12 is formed also in the upper part of the aforementioned pin center, large case 4.

[0014] the method of both sides of the pin center, large case 4 is equipped with the sphere detection

switch S1 (refer to drawing 14) constituted by a photoelectric switch, the limit switch, etc. -- the pattern starting gates 13 and 13 are usually formed A game sphere passes to these common pattern starting gates 13 and 13, and it is this sphere detection switch S1. When the sphere detection signal to depend occurs, the pattern display 10 will usually carry out a drive start through a pattern display drive circuit by instructions of a central control unit CPU, and a hit or a HAZURE indication will be given.

[0015] Furthermore it combines, the starting gate 14 is established in the directly under position of display 6, the winning-a-prize mouth switchgear 15 is arranged in the direct lower part at the pan of this starting gate 14, and the interior is also made into the starting gate 17. Conversion control is carried out through electric driving means at the synizesis position which this winning-a-prize mouth switchgear 15 is in the standing-up state of the opening-and-closing ****** 16 and 16, and covers the starting gate 17, and the open position by which opening-and-closing ****** 16 and 16 reverse-8-type-tilts, and shows a game sphere to the starting gate 17. If the pattern display 10 usually hits and this winning-a-prize mouth switchgear 15 is displayed, it will carry out an open drive.

[0016] And the aforementioned starting gates 14 and 17 are the sphere detection switches S2 while having the sphere detection switch S2 (refer to drawing 14) constituted by a photoelectric switch, the limit switch, etc. and generating the premium sphere of a predetermined number with passage of the game sphere like the usual winning-a-prize mouth. The aforementioned combination display 6 is driven through a pattern display drive circuit with the sphere detection to depend by instructions of a central control unit CPU. In addition, the starting gate 17 (winning-a-prize mouth switchgear 15) can also be used as a ball feed hopper to symmetry equipment 30, is distributed in this case, and makes a premium ball generated through equipment 30 so that it may mention later.

[0017] Winning-a-prize equipment 22 equipped with the below still broader special winning-a-prize mouth 23 of the aforementioned winning-a-prize mouth switchgear 15 is arranged. If a game sphere goes into this specific field 25 so that it may mention later by guidance operation of this lid 24 by opening a lid 24 to a cross direction by the solenoid, becoming the winning-a-prize mouth 23 from the well-known composition of guiding a game sphere, specially, and using the center section of the aforementioned special winning-a-prize mouth 23 as the specific field 25, the continuation opening operation is made to be generated in this winning-a-prize equipment 22.

[0018] Next, it explains per operation of composition of starting. If a game sphere is hammered out by the game board 3 and it usually passes through the pattern starting gates 13 and 13, the aforementioned common pattern display 10 will carry out a change start in three patterns which carry out a drive start, for example, contain "7", and will stop in about 10 seconds. And in "7" displays, this is considered as a hit. In this hit, the aforementioned winning-a-prize mouth switchgear 15 will be in an open state, and opening-and-closing ****** 16 and 16 is about 5.8. It opens during a second. In addition, this hit operation is good also as a both-way opening-and-closing operation. Moreover, usually, passage of the pattern starting gates 13 and 13 is memorized to four of the beginning, and is performed one by one.

[0019] And if the winning-a-prize mouth switchgear 15 will be in an open state, an inflow to the aforementioned starting gate 17 will be attained, and the operation frequency of the combination display 6 will improve. If one ball wins a prize of this opened winning-a-prize mouth switchgear 15, it will be in a synizesis state.

[0020] If a game sphere passes through the aforementioned starting gates 14 and 17, it will combine with supply of a premium sphere and display 6 will drive. In addition, when it passes continuously, the standby record lamp train 9 lights up one by one, and is suspended a maximum of 4 times. [0021] If the pattern displays 7a, 7b, and 7c will start change by change control by the pattern

display drive circuit if the combination display 6 drives with the sphere passage to the aforementioned starting gates 14 and 17, and about 8 seconds pass, change will stop in order of the pattern displays 7a, 7b, and 7c. When the pattern of the aforementioned pattern display 7a and pattern display 7b is in agreement at this time, after pattern display 7c's producing the special operation corresponding to a reach state, such as producing low-speed scrolling or other mechanical operations, and making it puff up a play person's feeling of an upsurge, pattern display 7c stops. At this time, when it stops in the pattern from which pattern display 7c differed, it returns to the original state.

[0022] For example, "1, 1, 1", "2, 2, 2", on the other hand, these pattern displays 7a, 7b, and 7c When it becomes the great success display of "3, 3, 3", "4, 4, 4", "A, A, A", etc. becoming the same [the pattern which consists of a number or the alphabet] While a loudspeaker emits singing through the sound processor of drawing 14, the solenoid of winning-a-prize equipment 22 drives. A lid 24 tilts ahead, the winning-a-prize mouth 23 opens wide specially, and if one of the conditions of whether about ten play spheres win a prize or to pass for about 29.5 seconds are satisfied, open operation will once be ended. If it was in this special winning-a-prize mouth 23, when it passes through the specific field 25, a continuation drive is carried out, and the winning-a-prize mouth 23 opens specially again after the open operation end. The number of times of this continuation operation may be a maximum of 16 times including first time opening.

[0023] Moreover, you may be made to consider the winning-a-prize mouth 23 with combination, such as "2, 2X", "4, 4X", and "6, 6X" (for X to be a variable), as a short time and the small hit which carries out number-of-times opening of few specially. Although the pattern displays 7a, 7b, and 7c are considering the case where it becomes the same number as "great success" with further above-mentioned composition, you may be made to consider a continuation number, for example as great success.

[0024] By the control-command means which consists of a central control unit CPU shown by drawing 14, a series of above-mentioned operations may be performed easily.

[0025] Next, the important section of this invention is explained. The symmetry equipment 30 shown in detail by drawing 4 -7 is arranged in the directly under position of the aforementioned winning-a-prize equipment 22. It explains per composition of this symmetry equipment 30. Symmetry equipment 30 is equipped with the input 31 by which opening of the upper surface was carried out to the upper part. This input 31 is equipped with guidance **** 32, and the bore 33 is formed in the center. And the bottom plate equipped with guidance **** 34 as well as the shape of the said heart is prepared in the lower part of aforementioned guidance **** 32. The discharge way 36 which shows a ball to the tangential direction of this guidance **** 34 is formed in the posterior section of aforementioned guidance **** 34, and the aforementioned bore 33 is open for free passage by the discharge way 36 and the upper and lower sides with **** 35 formed in the inferior surface of tongue of guidance **** 32. moreover, center-section first transition is effective in aforementioned guidance **** 34 -- a hole 37 and back right and left are invalid -- holes 38 and 38 are formed and still more effective -- a hole 37 is invalid to effective ** 39 which the ball detection switch S3 (refer to drawing 14) possessed -- holes 38 and 38 are open for free passage to invalid ** 40 and 40

[0026] It is in this composition, and the first transition section of the aforementioned input 31 projects from the game board 3, and turns into substantial regio oralis, and the ball which entered here falls on this discharge way 36 through **** 35 from the bore 33 of guidance **** 32. and by guidance operation of the discharge way 36, a ball flows and revolves around the sun from a tangential direction to guidance **** 34, and effective -- a hole 37 -- invalid -- it flows into either of the holes 38 and 38 this -- effective -- the ball included in the hole 37 turns into an effective ball

[0027] In order to perform opening-and-closing control of the aforementioned input 31 right above [of the symmetry equipment 30 of this composition], opening-and-closing lid equipment 43 is arranged. This opening-and-closing lid equipment 43 consists of solenoids 42 changed into the evacuation position which removes the piece 41 of a circular lid arranged possible [an attitude] from game board 3 front face, and this piece 41 of a circular lid on the first transition of an input 31 from the advance position which covers an input 31, and the game board 3, and enables the inflow of a hitted ball, as drawing 3 shows. Moreover, the evacuation operation of this piece 41 of a lid is performed after the open operation end of the aforementioned winning-a-prize equipment 22. And this timing control may be performed by the central control unit CPU shown by drawing 14. That is, timing-control equipment will be constituted by the central control unit CPU.

[0028] Opening of the symmetry equipment 30 by this opening-and-closing lid equipment 43 is performed a grade for 2 seconds. and effective -- a hole 37 -- entering -- ball detection switch S3 When ball detection is carried out and it becomes an effective ball, the hit probability the pattern display 10 usually carries out [probability] a change halt by "7" which makes the winning-a-prize mouth switchgear 15 open wide becomes 10 times.

[0029] That is, for the probability that the pattern display 10 will usually display a hit, although it is 1/3 on appearance, on soft (in practice), it is usually sometimes, and is 1/16, and this is 10/16. It will improve to open probability. The open frequency of opening-and-closing regulation equipment 15 becomes high by leaps and bounds by this, it combines in connection with this and the operation frequency of display 6 improves, while the probability which is becoming it a great success again becomes high, by supply of a premium ball, the gradual decrease inclination of a ball stops and ****** becomes good.

[0030] Next, the hit control means of the aforementioned common pattern display 10 are explained according to drawing 14. The random number value which circulates through 16 coma to "0" - "15" is stored in the storage ROM connected to the central control unit CPU, and the either is elected with the sphere passage to the aforementioned common pattern starting gates 13 and 13. And only the case where this value is "15" is considered as a hit, except [it] is judged to be HAZURE, if the number of storage is digested immediately after sphere passing to the pattern starting gates 13 and 13 when passage storage is carried out, change of the pattern display 10 will usually be started, based on the aforementioned judgment result, in a hit, usually, a drive halt is carried out and the pattern display 10 is indicated by "7."

[0031] Moreover, ball detection switch S3 When it becomes high probability by ON operation, ten coma of "6" - "15" is considered as a hit among the aforementioned random number values. That is, the usual probability 1/16 is 10/16. It becomes and probability becomes 10 times. And based on the decision value, a drive halt of the pattern display 10 will usually be carried out similarly.

[0032] It is made to make this high probability state continue till the next great success. In addition, you may make it change continuation conditions according to the content of a display of great success in front of opening of the aforementioned symmetry equipment 30. For example, high probability is maintained until the next great success occurs twice in the hit display of "7, 7, 7", and it is made to end by the next great success in other hit displays.

[0033] moreover, the aforementioned symmetry equipment 30 is effective -- two or more holes 37 are formed and you may make it change the number of times of continuation of great success according to the kind of the hole

[0034] In the hit display of the above "7, 7, 7", it is unconditionally better still also as high probability without making opening-and-closing lid equipment 43 into an open state.
[0035] By the same conditional factor, the multi-statement of making a high probability state into 10 times and 5 times as compared with a normal state etc. is carried out, and you may make it

change [in the hit display of "7, 7, 7"] the content of probability according to the content of a display like 5 times in 10 times and other hit displays.

[0036] <u>Drawing 8</u> shows the second example, is made to carry out opening of the aforementioned winning-a-prize mouth switchgear 15 to a lower part, and arranges above-mentioned symmetry equipment 30 in the directly under position of the aforementioned winning-a-prize mouth switchgear 15.

[0037] If it is in this composition, the aforementioned winning-a-prize mouth switchgear 15 carries out an open drive, the whole of this ball that flowed in the state of opening will flow into the aforementioned symmetry equipment 30, and it can be distributed to an effective ball and an invalid ball.

[0038] In this case, when it becomes an effective ball, it is made to raise the hit probability of the aforementioned combination display 6. The hit probability of this combination display 6 raises this by about 10 times, when it is made about into 1/515.

[0039] <u>Drawing 9</u> is distributed to the directly under position of this winning-a-prize equipment 50, and arranges equipment 30 while it shows the third example and changes the composition of winning-a-prize equipment 50.

[0040] The composition of the aforementioned winning-a-prize equipment 50 is explained according to drawing 10 -13. The starting gates 52 and 52 are arranged in right and left of a substrate 51. When a ball wins a prize of these starting gates 52 and 52, while a premium ball is generated, the combination display 6 drives.

[0041] Moreover, winning-a-prize equipment 50 is arranged in the center section of the aforementioned substrate 51. As for this winning-a-prize equipment 50, the piece 55 of opening-and-closing wings is supported pivotably by the both sides of the entrance of the ball receiving part 53. The aforementioned piece 55 of opening-and-closing wings controls rotation operation of the pivot by the solenoid 56 through a link 57, and, thereby, an opening-and-closing operation is performed. Moreover, on the aforementioned ball receiving part 53, the gate 58 which the sensor (not shown) used as a specific field possessed is arranged. This gate 58 is concealed, after the piece 55 of opening-and-closing wings has covered, as drawing 9 shows.

[0042] Furthermore, opening of the lower part of the aforementioned ball receiving part 53 is carried out, and the stop guide plate 61 opening-and-closing control is carried out [the guide plate] by the solenoid 60 is arranged so that this opening 59 may be covered. This stop guide plate 61 is in a cover state, guides an inflow ball back and is equipped with the role supplied to a predetermined flowing-down way. Moreover, the hold board 64 opening-and-closing control is carried out [the board] by the solenoid 63 is arranged in the aforementioned gate 58, in the state of **** of this hold board 64, the gate 58 is covered and stay of one ball is enabled. This winning-a-prize equipment 50 has the role of the supply control unit which controls the ball to symmetry equipment 30 while serving as a special winning-a-prize mouth which the aforementioned combination display 6 hits, and catches a ball when it is a state.

[0043] On the other hand, it distributes directly under the aforementioned winning-a-prize equipment 50, and equipment 30 is arranged. In the input 31 of this symmetry equipment 30, the ball from the side is regulated with the nail etc. so that the inflow only of the ball from the opening 59 of the aforementioned ball receiving part 53 may be attained.

[0044] It explains per aforementioned composition. If it is in an ordinary state, the aforementioned stop board 61 is in the **** state, and opening 59 is intercepted. In addition, the aforementioned hold board 64 is save status, and the gate 58 is opened wide. Moreover, the aforementioned piece 55 of opening-and-closing wings is also covered, therefore the inflow of a ball is prevented. And if the combination display 6 hits and an operation arises, while the piece 55 of opening-and-closing wings

will be wide opened as the aforementioned solenoid 56 driven and shown in <u>drawing 10</u> and 11, and flowing down of the ball to the aforementioned gate 58 will be attained and producing the role of a specific field, many balls are caught on the piece 55 of opening-and-closing wings.

[0045] If satisfied [with this piece 55 of opening-and-closing wings] of one of the conditions of whether about ten game spheres winning a prize or passing for about 29.5 seconds, open operation will once be ended. Moreover, when it passes through the gate 58, a continuation drive is carried out, and the piece 55 of opening-and-closing wings opens again after the open operation end. The number of times of this continuation operation may be a maximum of 16 times including first time opening.

[0046] And if this operation becomes the 16th time, a solenoid 63 will drive, the hold board 64 will march out, and as <u>drawing 12</u> shows, stay of the ball x of a piece will be enabled at the gate 58. And if the predetermined number flows or a predetermined time passes, while drive release of the solenoid 56 will be carried out and the aforementioned piece 55 of opening-and-closing wings will return to a closing position, as solenoids 60 and 63 drive, the stop board 61 and the hold board 64 evacuate to open position and <u>drawing 13</u> shows, the ball x which was piling up in the gate 58 distributes from the stop board 61, and falls to the input 31 of equipment 30. and this ball x is effective -- a hole 37 -- invalid -- it flows into either of the holes 38 and 38, and effective -- when it goes into a hole 37, as <u>drawing 15</u> mentioned above shows, the hit probability the pattern display 10 usually carries out [probability] a change halt by "7" which makes the winning-a-prize mouth switchgear 15 open wide becomes 10 times Explanation that the operation effect by this effective ball and the modification are the same as the first example explained and detailed is omitted. In addition, as a modification of this third example, a supply control unit can be distributed independently [the aforementioned winning-a-prize equipment 50], and can also be formed on equipment 30.

[0047] By the control-command means which consists of a central control unit CPU shown by drawing 14, a series of operations of the third above-mentioned example may be performed easily. [0048]

[Effect of the Invention] this invention is equipped with the combination display 6 constituted by the pattern displays 7a, 7c, and 7b and the winning-a-prize mouth switchgear 15 which open and close the starting gates 14 and 17 as mentioned above. usually by the hit display of the pattern display 10 Only when the ball included in the symmetry equipment 30 which is in some which were made to carry out the open drive of the aforementioned winning-a-prize mouth switchgear 15, and is opened wide at a predetermined stage turns into an effective ball Usually, the probability of a hit display of the pattern display 10 or the combination display 6 was maintained to high probability until the great success display of a predetermined time occurred. For this reason, it becomes that to which the reduction in a sphere would be inhibited, the drive frequency of the combination display 6 would improve further, gain predetermined to a game person will newly be given, the hope new [after great success] was given by the game person, and the supply of the gain was moreover rich in change. Furthermore, since the shift conditions of this probability are distributed and it was made to be based on a symmetry operation of equipment 30, a play person can understand change conditions easily, has challenge volition stimulated and has the effect which was [raise / further / the interest of a pachinko game] excellent.

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the front view showing the pachinko machine 1 of the first example of this invention.

[Drawing 2] It is the front view of the pin center, large case 4.

[Drawing 3] It is the separation perspective diagram of opening-and-closing lid equipment 43.

[Drawing 4] It is the vertical section front view which symmetry equipment 30 shows.

[Drawing 5] It is the drawing 4 A-A cross section.

[Drawing 6] It is the plan which symmetry equipment 30 shows.

[Drawing 7] It is the drawing 4 B-B cross section.

[Drawing 8] It is the front view showing the pachinko machine 1 of the second example of this invention.

[Drawing 9] It is the front view showing the pachinko machine 1 of the third example of this invention.

[Drawing 10] It is the front view of winning-a-prize equipment 50.

[Drawing 11] It is the vertical section front view of winning-a-prize equipment 50.

[Drawing 12] It is the vertical section side elevation of winning-a-prize equipment 50.

[Drawing 13] It is the vertical section side elevation showing other operating states of winning-a-prize equipment 50.

[Drawing 14] It is the block diagram showing a control-command means.

[Drawing 15] It is the flow chart view usually showing hit control of the pattern display 10.

[Description of Notations]

1 Pachinko Machine

6 Combination Display

7a, 7b, 7c Pattern display

10 It is Usually Pattern Display.

13 13 It is usually the pattern starting gate.

14 17 Starting gate

15 Winning-a-Prize Mouth Switchgear

23 It is Winning-a-Prize Mouth Specially.

30 Symmetry Equipment

31 Input

37 Effective -- Hole

38 Invalid -- Hole

40 Opening-and-Closing Lid Equipment

50 Winning-a-Prize Equipment

53 Ball Receiving Part

- 55 Piece of Opening-and-Closing Wings
- 58 Gate
- 59 Opening
- 61 Stop Board
- 64 Hold Board

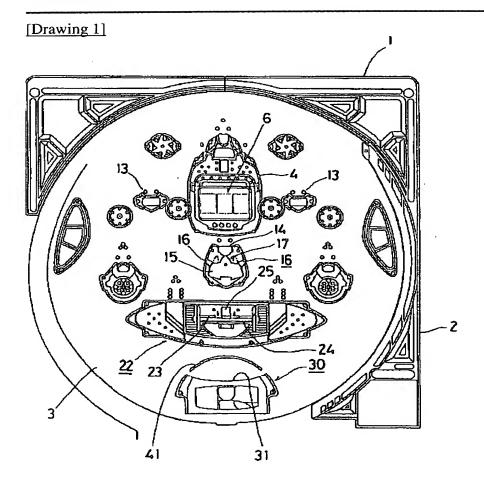
[Translation done.]

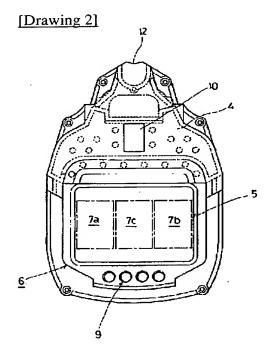
* NOTICES *

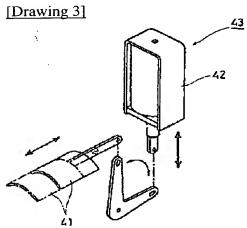
Japan Patent Office is not responsible for any damages caused by the use of this translation.

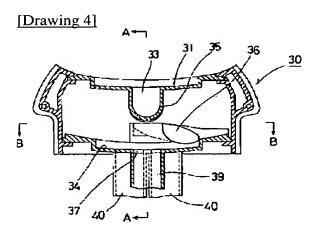
- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

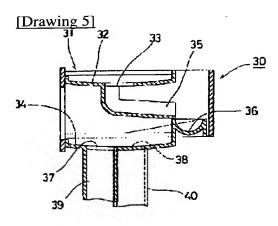
DRAWINGS

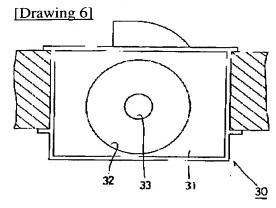


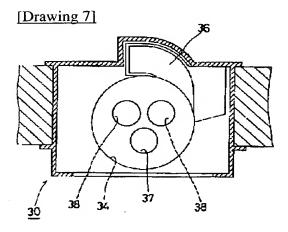






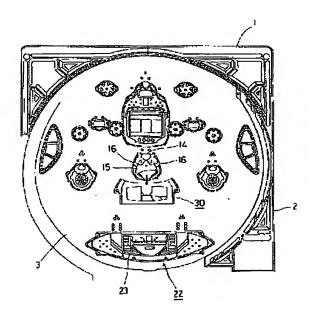


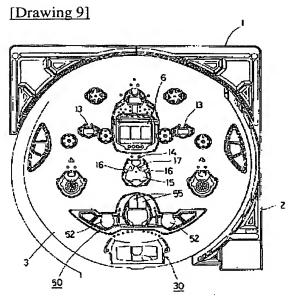


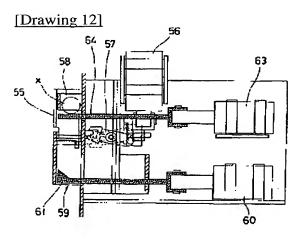


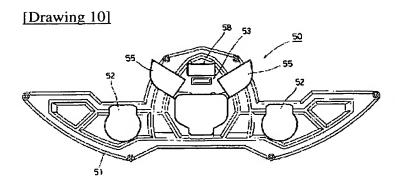
[Drawing 8]

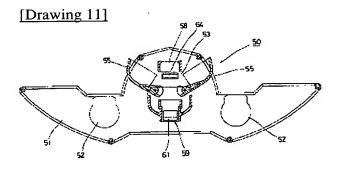
15

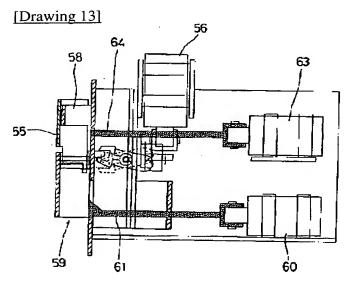




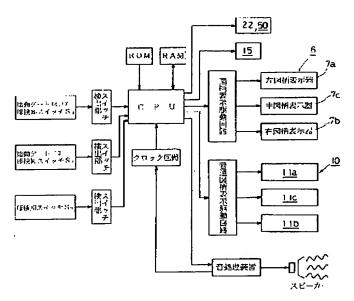


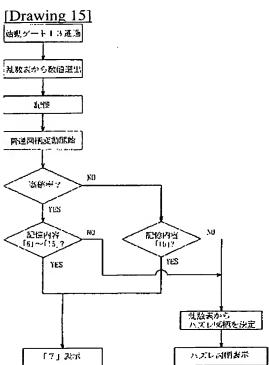






[Drawing 14]





[Translation done.]